



TURNED OPTICAL SYSTEM INTO A SINGLE, REAL-TIME LIDAR-PRODUCING SYSTEM IN 3 MONTHS

APPROACH

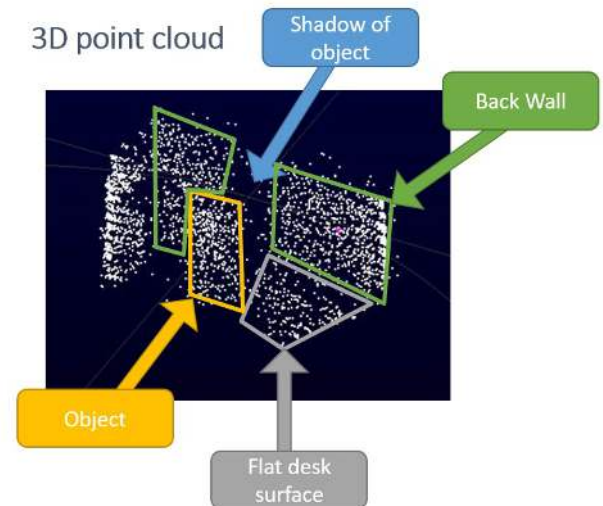
- Perform on-site visit to establish state of client's system
 - > Discovered that prototype system did not include real-time data processing and only supported 2D
- Establish key requirements in electronics, firmware, visualization, and packaging to design the most functional and compact system

RESULTS

- Integrated client's FMCW LIDAR technology into our electronics and software technology to create a real-time 3D visualization
- Consolidated a room full of hardware and electronics into a single benchtop system
- Implemented custom logic analyzer and software packages to DMA 400MB of FPGA's internal signal history to DDR3, which assisted in system debug and verification

KEY TOOLS & TECHNOLOGIES

- FPGA
- 3D/Point-cloud system
- RTOS
- TCP/IP



ALTEN TECHNOLOGY